UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TETSURO MOTOYAMA and AVERY FONG

Appeal 2007-2086
Application 09/575,710
Technology Center 2100

Decided: October 31, 2007

Before ROBERT E. NAPPI, JAY P. LUCAS, and
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1, 3, 4, 6-11, 13, 14, 16-21, 23, 24, and 26-39. Claims 2, 5, 12, 15, 22, and 25 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

THE INVENTION

The disclosed invention relates generally to a method and system that can monitor state and event information of a remote device and communicate the information over the Internet to a central information system. The central information system can analyze the state and event information to determine the condition of the remote device and/or whether the remote device needs preventative or reparative maintenance (Spec. 2).

Independent claim 1 is illustrative:

1. A system for tracking at least one of a device state and a device event of a remotely monitored device, comprising:

a receiver configured to receive the at least one of the device state and the device event of the remotely monitored device;

a digital storage system configured to maintain a history of (1) the at least one of the device state and the device event of the remotely monitored device, and (2) a service history of the remotely monitored device;

an analyzer configured to analyze the service history and the at least one of the device state and the device event of the remotely monitored device to determine a service request to be performed on the remotely monitored device; and

a service depot comprising a computer configured (1) to receive the service request from the analyzer over a Wide Area Network (WAN), (2) to analyze the service request, and (3) to contact a user of the remotely monitored device regarding the service request,

wherein the service depot is configured to provide preventive and reparative maintenance to the remotely monitored device.

THE REFERENCES

Motoyama	US 5,887,216	Mar. 23, 1999
Othmer	US 6,167,358	Dec. 26, 2000
Hummel	US 6,584,454 B1	June 24, 2003

THE REJECTIONS

Claims 1, 3, 4, 6-8, 11, 13, 14, 16-18, 21, 23, 24, 26-28, and 31-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Motoyama in view of Hummel.

Claims 9, 10, 19, 20, 29, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Motoyama in view of Hummel, and further in view of Othmer.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Briefs and the Answer for the respective details thereof.

ISSUE(S)

The issue is whether Appellants have shown the Examiner erred in holding the cited combination of prior art would have rendered the claimed subject matter obvious to an artisan having ordinary skill and common sense at the time of the invention. More particularly, we decide the following issues we have determined are dispositive in this appeal:

1. Whether Motoyama teaches and/or suggests analyzing the service history of a remotely monitored device to determine a service request

to be performed on the remotely monitored device, as required by the language of independent claims 1, 11, and 21.

2. Whether the Examiner has articulated an adequate reasoning with a rational underpinning to support the combinability of Motoyama and Hummel.

PRINCIPLES OF LAW

"What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under *§ 103*." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007). To be nonobvious, an improvement must be "more than the predictable use of prior art elements according to their established functions." *Id.* at 1740. Appellants have the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)). Therefore, we look to Appellants' Briefs to show error in the proffered prima facie case.

ANALYSIS

We consider first the Examiner's rejection of claims 1, 3, 4, 6-8, 11, 13, 14, 16-18, 21, 23, 24, 26-28, and 31-39 as being unpatentable over the teachings of Motoyama in view of Hummel. Since Appellants' arguments with respect to this rejection have treated these claims as a single group

which stand or fall together, we will select independent claim 1 as the representative claim for this rejection. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2005).

Elements under section 103

We decide the question of whether Motoyama teaches and/or suggests analyzing the service history of a remotely monitored device to determine a service request to be performed on the remotely monitored device, as required by the language of independent claims 1, 11, and 21.

Appellants contend that Motoyama fails to disclose "an analyzer configured to analyze the service history and the at least one of the device state and the device event of a remotely monitored device to determine a service request to be performed on the remotely monitored device," as recited in claim 1 (App. Br. 5).

The Examiner disagrees (Ans. 10). The Examiner, as finder of fact, has determined that the aforementioned argued limitations broadly encompass Motoyama's monitoring device that analyzes the received image density information by comparing the received image density information with information stored in a database (step 410 of Fig. 8). The Examiner notes that Motoyama's database describes various information pertaining to the monitored device, such as *service history*, optional equipment, usage information, or other information (*See* Motoyama, col. 10, ll. 4-7). The Examiner further notes that Motoyama determines when it is appropriate to change the parameters of the remotely monitored device (*See* Motoyama, Fig. 8 and col. 10, ll. 14-21) (Ans. 10).

In the Reply Brief, Appellants concede that the received image density information disclosed by Motoyama "could reasonably be

interpreted as reading on the claimed 'at least one of the device state and the device event' of the monitored device." (Reply Br. 2). However, Appellants note that claim 1 requires an analyzer that is configured to analyze the service history, as well as the device state and/or device event of the remotely monitored device, to determine a service request. Appellants contend that it does not follow that the information looked up in Motoyama's database *must* include service history just because the database includes service history, among other information. Thus, Appellants conclude that Motoyama does not disclose analyzing service history obtained from the database (*Id.*).

We begin our analysis by noting that Appellants' argument appears to be based upon Motoyama having a plurality of different types of databases, instead of just one. However, we find the breadth of Motoyama's disclosure supports alternate embodiments having "more or less databases," as follows:

> The data bases as illustrated in FIGS. 9A-9C are illustrative of the type of information which is stored regarding the machine. Even though illustrated as *separated data bases, the implementation of the data bases may include more or less data bases*. Different departments within a company may maintain different data bases describing information about the various machines. The *service data base* will be most complete about individual machines, contain a complete *service history* of each machine, and may be stored at a customer service division [emphasis added].

(Motoyama, col. 10, ll. 56-65).

Thus, we find the breadth of Motoyama's disclosure supports an alternate embodiment of less than the three databases shown in Figures 9A-9C, such as a single database. We acknowledge that a single database

embodiment (that may contain other data in addition to the service data) does not necessarily (i.e., inherently) indicate that the service data would have been retrieved each time the single database was accessed. However, we find the presence of such service data in a single database (or contained in one of multiple databases) would have strongly *suggested* to a reasonably skilled artisan that the service data would have been accessed and analyzed for some purpose. Otherwise, the storage of Motoyama's service data would have been superfluous. Clearly, the need for different users to repeatedly set the printer or copier image density to a darker setting reflects a condition where the toner is running low and/or the photoconductive drum is defective. Thus, we find the replacement of a toner cartridge or photoconductive drum to be exemplary of the type of service data included in an office printer service history (*See e.g.*, Motoyama, col. 13, ll. 18-47; *see also* col. 14, ll. 55-62). We note that Motoyama further teaches an embodiment where a service technician is called in response to such an analysis, as follows:

> Alternatively, communication with a diagnostic service center is performed to analyze the operation of the copier as explained below with respect to FIG. 16. When a problem with the copier is determined to exist in step 504, corrective action is performed in step 506 which changes the default density based on the user settings of the previous jobs, a conventional density setting process, or alternatively, a service technician replaces the appropriate components which are defective such as the photoconductive drum, as described with respect to FIG. 16.

(Motoyama, col. 15, ll. 42-51).

We note that the Examiner's rejection is not based upon inherency, but rather upon obviousness. The Supreme Court has found that "[i]n

making the determination of 'obviousness,' it is important to remember that the criterion is measured not in terms of what would be obvious to a layman, but rather what would be obvious to one 'reasonably skilled in (the applicable) art.'" *Dann v. Johnston*, 425 U.S. 219, 229 (1976) (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 37 (1966)). In *Dann*, the Supreme Court reached a finding of obviousness by concluding that "[a]ssuming such an awareness, respondent's system would . . . have been obvious to one 'reasonably skilled in (the applicable) art'" even though, as the court explicitly noted, "[t]here may be differences between respondent's invention and the state of the prior art." *Dann*, 425 U.S. at 229 (quoting *Graham*, 383 U.S. at 37). In particular, we note that the Supreme Court held in *Dann* that "the mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness . . . [where] [t]he gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art." *Dann*, 425 U.S. at 230 (holding that claims directed to a machine system for automatic record keeping of bank checks and deposits were obvious in view of the use of data processing equipment and computer programs in the banking industry at the time of the invention in combination with a prior art automatic data processing system using a programmed digital computer for use in a large business organization).

Here, we find the presence of service data in Motoyama's database(s) would have strongly *suggested* to a reasonably skilled artisan that the service data would have been accessed and analyzed, as discussed *supra*. Therefore, we conclude that any purported gap between the Examiner's proffered combination of Motoyama and Hummel and Appellants' system is simply

not so great as to render Appellants' system nonobvious to one reasonably skilled in the art.

Combinability under section 103

Next, we decide the question of whether the Examiner has articulated an adequate reasoning with a rational underpinning to support the combinability of Motoyama and Hummel.[1]

Appellants contend there is no technological motivation to combine the teachings of Motoyama and Hummel (App. Br. 8). Appellants note that Motoyama teaches the service requests originate with the monitoring device. Appellants further note that Hummel teaches the service requests originate with the user of the diagnostic machines and are sent to the central service facility (22) via management station (70) (*See* Hummel, Fig. 1). Thus, Appellants state it is unclear how a combined system would work in which the Hummel management station is replaced by the Motoyama monitoring device since the Motoyama monitoring device "is not configured to send out service requests to a service depot or to simply forward service requests generated by a diagnostic machine." (App. Br. 8).

[1] "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Moreover, "'there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness' . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 127 S. Ct. at 1741 (quoting *In re Kahn*, 441 F.3d at 988).

We disagree. We note that Motoyama expressly teaches an embodiment where a service technician is called in response to a diagnosed problem with the monitored device:

> The diagnostic service center may attempt to correct any problems which exist with the business office device by performing remote diagnostic and corrective procedures. If it is not possible for the problem to be corrected remotely, the diagnostic service center can instruct a service call to be performed in order for the problem to be corrected manually during a service call.

(Motoyama, col. 3, ll. 17-23; *see also* col. 15, ll. 42-51).

We note the Examiner merely relies upon Hummel for teaching the instant claimed "service depot" and associated limitations (*See* claim 1; *see also* Ans. 5-6, 10-12). Our reviewing court has stated: "[t]he use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009 (CCPA 1968)).

Moreover, after carefully considering all of the evidence before us, we conclude the Examiner's proffered combination of Motoyama and Hummel reasonably teaches and/or suggests Appellants' claimed invention in terms of *familiar elements* (e.g., office devices, monitoring stations, and service facilities) that would have been combined by an artisan having ordinary skill and common sense using *known methods* to achieve a *predictable result*. *See KSR*, 127 S. Ct. at 1739-40. "The combination of familiar elements according to known methods is likely to be obvious when it does no more

than yield predictable results." *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting *KSR*, 127 S. Ct. at 1739-40).

For at least the aforementioned reasons, we find Appellants have failed to rebut the Examiner's legal conclusion of obviousness by establishing insufficient evidence of *prima facie* obviousness or evidence of secondary indicia of nonobviousness. Therefore, we sustain the Examiner's rejection of independent claim 1 as being unpatentable over Motoyama in view of Hummel.

Appellants note that independent claims 11 and 21 recite limitations analogous to the limitations recited in claim 1 (App. Br. 8). Pursuant to 37 C.F.R. § 41.37(c)(1)(vii), we have decided the appeal with respect to claims 3, 4, 6-8, 11, 13, 14, 16-18, 21, 23, 24, 26-28, and 31-39 in this group on the basis of the selected claim alone. Therefore, we sustain the Examiner's rejection of these claims as being unpatentable over Motoyama in view of Hummel for the same reasons discussed *supra* with respect to representative claim 1.

Dependent claims 9, 10, 19, 20, 29, and 30

We consider next the Examiner's rejection of claims 9, 10, 19, 20, 29, and 30 as being unpatentable over the teachings of Motoyama in view of Hummel, and further in view of Othmer.

Appellants contend that Othmer fails to remedy the deficiencies of Motoyama and Hummel, as previously discussed (App. Br. 8-9).

In response, we find no deficiencies with the Examiner's proffered combination of Motoyama and Hummel, as discussed *supra*. Thus, Appellants have not presented any substantive arguments directed to the

separate patentability of dependent claims 9, 10, 19, 20, 29, and 30. Therefore, we sustain the Examiner's rejection of these claims as being unpatentable over Motoyama in view of Hummel and Othmer for the same reasons discussed *supra* with respect to claim 1. *See In re Young,* 927 F.2d 588, 590 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii)(2005).

DECISION

Based on the findings of facts and analysis above, we conclude that the Examiner did not err in rejecting claims 1, 3, 4, 6-11, 13, 14, 16-21, 23, 24, and 26-39 under 35 U.S.C. § 103(a) for obviousness. Therefore, the decision of the Examiner rejecting claims 1, 3, 4, 6-11, 13, 14, 16-21, 23, 24, and 26-39 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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